REMARKS

Claims 1-13 remain in the application, non-elected claims 14 and 1 having been canceled. Applicant notes with appreciation the allowance of claim 7 and the indication of patentable subject matter in claims 5, 12 and 13. By the above amendments, claims 5, 12 and 13 are rewritten in independent form and also amended to address the Section 112 issues raised in paragraph 3 of the Office action, and these claims are believed now in condition for allowance.

The claims have been amended to address the Section 112 issues raised by the examiner in paragraph 3 of the Office action. The amendments are believed self-explanatory, with the following comments being in order.

Regarding claim 11, the Office Action contains an objection for lack of antecedent basis of the limitation "the delay processor". Applicant wishes to draw the attention to parent claim 8, where the delay processor is recited.

The anticipation rejection of claims 1, 2, 6, 8 and 9 stated in paragraph 5 of the Office action is respectfully traversed. Jensen (WO 01/01731) is a counterpart of US Appl. No. 09/696,264, filed October 26, 2000, discussed in the Background section of the present application. It issued as USP 6,704,422 on March 9, 2004. Jensen shows a hearing aid comprising spaced apart microphones, wherein the sound-receiving characteristic may change between an omnidirectional characteristic and a directional characteristic by appropriate settings of control parameters of a pair of controllable attenuators. Claim 1 of the present application distinguishes over this reference by the recitation of a parameter control means for estimating the directionally processed signal and for setting a value of the parameter *omni* suitable for minimizing the directionally processed signal. This provides a specific approach for selecting appropriate values of the parameter *omni*.

The Jensen reference mentions the possibility of varying or selecting values of *omni* within the range from 0 to 1 but does not provide a specific strategy for selecting any particular value. The invention as defined in present claim 1 provides a specific strategy by including a means for minimizing the directionally processed signal. The invention does not limit the range of *omni* as narrowly as the prior art, and is suitable for providing a wider range of options of the directional characteristic. The invention provides a simple rule suitable for implementation in an automatic system and suitable for providing a hearing aid capable of continually adapting to provide a useful acoustic signal while minimizing noise.

Claim 2 through its dependency inherits the limitations of claim 1, and is therefore similarly distinguished over the cited prior art. Claim 2 further recites means for controlling the parameter *omni* within the range from minus 1.5 to plus 1.0. The Jensen reference only suggests varying the parameter *omni* within a range 0 to 1. Claim 2 does not recite that the device varies the parameter *omni* over a range that falls within the range of minus 1.5 to 1.0, but that it is capable of variation over that entire range, which Jensen is not. Therefore claim 2 provides further distinguishing features.

Claim 8, similarly to claim 1, distinguishes the Jensen reference through the recitation of estimating the directionally processed signal; and setting a value of the parameter *omni* suitable for minimizing the directionally processed signal.

Claim 9 through its dependency inherits the limitations of claim 8, and is therefore similarly distinguished over the cited prior art. Claim 9 further distinguishes over the cited art for the same additional reason as claim 2.

The obviousness rejection of claims 3-4 and 10-11 stated in paragraph 7 of the Office action is also respectfully traversed. First of all, claim 3 depends on claim 1 and distinguishes over Jensen for the rcasons given above with respect to claim 1. Further, while Jensen may teach that omni is an adjustable control parameter, the examiner must have some further basis for the position that it would have been obvious to control the parameter in the manner claimed, other than the broad allegation that once control is generally suggested, all manners of control are obvious. The examiner has cited no art nor given any reason (other than the teaching of the present application) which would have led the ordinarily skilled artisan to adjust the *omni* values to achieve a pair of null directions, symmetrical about the 180 degrees direction, while also . To the contrary, although directional microphone systems having a pair of null directions, symmetrical about the 180 degrees direction, have been available in the prior art (figure of eight-mode), the implementations have been different. WO 01/01731 to Jensen shows a design capable of varying a sound receiving characteristic between an omnidirectional characteristic (spherical mode) and a directional characteristic with a null direction in the 180-degree direction (cardiod). Nothing in the reference suggests that this design could in any way be used to provide a directional characteristic with a pair of null directions. Nothing in the prior art provides a design capable of changing between omni-mode, cardiod-mode and figure-of-eight-mode in such a simple way and without phase artifacts.

Claim 4, through its dependency, inherits the limitations of claim 1, and is therefore distinguished, as explained above, over the cited prior art. Claim 4 further recites that thc parameter control means is adapted for minimizing the directionally processed signal by applying an LMS-algoritm. The prior art has not shown the application of LMS-algorithms to adaptive control of delay processors. Therefore, claim 4 provides further distinction over the prior art.

Claim 10, similarly to claim 3, refers to providing a directional characteristic with a pair of null directions, symmetrical about the 180° direction, and is similarly distinguished over the prior art.

Claim 11, similarly to claim 4, refers to minimizing the directionally processed signal by applying an LMS-algoritm, and is similarly distinguished over the prior art.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

David J. Cushing
Registration No. 28,703

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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23373
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Date: May 9, 2005